IN THE CLAIMS:

Please cancel claims 3, 8, and 13-34 without prejudice or disclaimer of the subject matter disclosed therein.

Please replace claims 1-2, 4-7, and 9-12 as follows:

1. An implant of genetically modified cells comprising an exogenous nucleotide sequence encoding all or part of an antibody directed against a tumor antigen or an epitope specific for an infectious and pathogenic microorganism, said exogenous nucleotide sequence being place under the control of elements necessary for its expression and for the secretion of said antibody, wherein said antibody is modified by fusion to a toxic or immunopotentiating substance, said antibody being functional and produced at levels of at least 50 ng/ml after reimplantation of said implant in an organism.

2. The implant according to Claim 1, wherein said antibody is selected from the group consisting of:

- a native antibody,
- a chimeric antibody
- an antibody fragment, especially a fragment Fab, $F(ab')_2$, Fc, or scFv, and
- a bispecific antibody.

4 The implant according to Claim 1, wherein said antibody is modified by fusion to a toxic substance selected from a ribonuclease, and especially the ribonuclease from Bacillus amyloliquefaciens, ricin, diphtheria toxin, cholera toxin, herpes simplex virus thymidine kinase, cytosine deaminanse from *Escherichia coli* or from a yeast of the genus *Saccharomyces*, exotoxin from *Pseudomonas* and human angiogenin or an analog of said substances.

5. The implant according to Claim 1, wherein the cells are genetically modified by transfection of a plasmidic, retroviral, herpetic, from an adenoviral, adenovirus-associated virus vector comprising said exogenous nucleotide sequence placed under the control of the elements necessary for its expression and for the secretion of said antibody.

6. The implant according to Claim 5, wherein said vector is dicistronic.

7. The implant according to Claim 6, wherein said vector is retroviral and comprises from 5' to 3':

(a) a 5' retroviral LTR,

(b) an encapsidation region,

(c) an exogenous nucleotide sequence comprising:

- an internal promoter,
- a first sequence encoding the heavy chain of an antibody,
- a ribosome entry initiation site,

- a second sequence encoding the light chain of an antibody, and

- a third sequence encoding a toxic or immunopotentiating substance fused downstream and operably to the second sequence; and,

(d) a 3' retroviral LTR.

9. The implant according to Claim 1, comprising genetically modified autologous cells.

10. The implant according to Claim 9, comprising genetically modified fibroblasts.

11. The implant according to Claim 1, comprising from 10^6 to 10^{12} genetically modified cells.

12. A method for the preparation of an implant according to Claim 1, said method comprising contacting the genetically modified cells with an extracellular matrix.

Please add claims 35-36 as follows:

35. The implant according to Claim 1, wherein said exogenous nucleotide sequence encodes the signal sequence and the extracellular I and II domains of the CD4

protein operably fused to the constant γ3 region (hinge region-CH2 and CH3) of the heavy chain of the 2F5 antibody.

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36. The implant according to Claim 1 wherein said exogenous nucleotide sequence encodes the signal sequence and the extracellular I and II domains of the CD4 protein operably fused to the constant γ3 region (hinge region-CH2 and CH3) of the heavy chain of the 2F5 antibody and operably fused to the mature human angiogenin.